



COMPARATIVE ASSESSMENT OF YOUNG PEOPLE'S PSYCHOSOCIAL, ECONOMIC STATE AND REPRODUCTIVE HEALTH NEEDS BETWEEN TOTAL AND PARTIAL LOCKDOWN STATES OF NIGERIA.

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ABSTRACT

Background: In Nigeria, adolescents and young adults, age 10-24 years constitute 32% of the entire population. They are particularly vulnerable when disasters occur, such as in the current pandemic. Existing events and circumstances including the various pandemic-related movement restrictions (lock-down) influences behavioural attitudes and predisposes to risky sexual behaviours.

Aim: The objective of this study was to investigate the socio-economic status and reproductive health needs of the young people during COVID-19 pandemic.

Methodology: This is a comparative cross-sectional study conducted between a total lockdown (Osun) state and partial lockdown (Oyo) state in South-Western Nigeria. A convenience sampling technique was adopted using a self-administered closed-ended questionnaire designed using Google form and data were then analysed using SPSS version 22. Bivariate analysis and Logistic regression were performed with the level of significance set at $p < 0.05$.

Results: A higher proportion of those in Osun (total lockdown) state have their needs extremely difficult to meet during the pandemic period compared to Oyo (partial lockdown) had their needs only a little difficult to meet. Different factors were found to influence the social, economic effect and reproductive health needs but age and educational level attained were found to be common factors that affected young people needs during the lockdown period.

Conclusion: Access to contraceptive drastically reduced during this pandemic, especially among those under total lockdown, this may consequently lead to the increase incidence of unwanted pregnancies among the youths, which if not well managed could lead to unsafe abortion and invariably, death. As new COVID-19 cases continue to emerge, staying at home for prolonged periods of time can pose a significant challenge on the health of young people.

Keywords: Young People, Psychosocial State, Economic State, Reproductive Health Needs, Lockdown.





INTRODUCTION

Globally, there is a call for a holistic concept that includes the vulnerable groups in the design of interventions and responses during the COVID-19 pandemic. Children, adolescents and youths are particularly vulnerable when disasters occur, such as in the current pandemic.^{1,2} They require continued support and information on sexual and reproductive health issues during the COVID-19 pandemic (UNFPA).³ The impact on the socio-economic, political and psychological livelihood of people in the society put the general population at risk of mental health distress. Several studies especially in Asia and Europe have reported serious psychological distress experiences of members of the society in response to the COVID-19 pandemic.⁴⁻⁶ Considering its impact, the COVID-19 pandemic has been likened to natural disasters mass dispute, and war outbreaks.⁷

The present pandemic is, however, more devastating because unlike during a natural disaster or war outbreak whereby people can relocate or build a sophisticated defense system to minimize or escape any foreseeable negative impact, there is nowhere to run to escape the impact of COVID-19 pandemic⁸. Children, adolescents and youths are constantly exposed to harsh socio-economic conditions and are disproportionately at risk of various health challenges.^{9,10}

METHODOLOGY

The study was conducted in 2 states of the South-Western Nigeria. It was a comparative cross-sectional study design between a total

lock-down (Osun) state and partial lockdown (Oyo) state. A convenience sampling technique was adopted (due to the restriction of movement) in the administration of the questionnaire among people, aged 10 – 24 years in Oyo and Osun states. The two states were representatives of the lock-down and non-lockdown states. A closed-ended questionnaire was designed using Google form and was self-administered using enabled smartphones, however, their identity was hidden and confidentiality assured. Every eligible person aged 10-24 years was included in the study while those without smartphones were excluded. Data was collected over 8 days between 1st and 9th of May, 2020. Responses generated from the Google form was converted into Microsoft Excel format and subsequently exported into SPSS. Data were then analysed using SPSS version 22 and presented in form of frequency tables. Bivariate analysis and Logistic regression were performed appropriately with the level of significance set at $p < 0.05$.

RESULTS

Table 1 shows the socio-demographic characteristics of respondents in the total lockdown (Osun) state and the partial lockdown state (Oyo state). The greatest frequencies were those aged 20-24 years for both states with 59.5% and 62.8% for Osun and Oyo states respectively. Majority of the respondents were females, Yoruba tribe, has tertiary education and are Christians. Most of the respondents were students with 89.2% and 91.3% for Osun and Oyo states respectively. Most of the respondents' parents are civil servants/professionals.

Table 1: Socio-demographics characteristics of respondents

Variables	Osun 148	Oyo 149
Age (years)		
10-12	12(8.1)	16(3.4)
13-15	12(8.1)	19(6.1)
16-19	36(24.3)	31(27.7)
20-24	88(59.5)	83(62.8)
Sex		
Female	92(62.2)	84(62.2)
Male	56(37.8)	65(37.2)
Educational level attained		
None	15(10.1)	14(2.7)
Primary	12(8.1)	10(0.0)
Secondary	19(12.8)	29(19.6)
Tertiary	102(68.9)	94(77.0)
Ethnicity		
Not Yoruba	15 (10.1)	25 (16.8)
Yoruba	133(89.9)	124(83.2)
Religion	(n=147)	
Christianity	102(68.9)	114(76.5)
Islam	45(31.1)	35(23.5)
Fathers occupation		
Artisan	15(10.1)	13(8.7)
Civil servant professional	69(46.6)	75(50.3)
Others	36(24.3)	27(18.1)
Trader/farmer	21(14.2)	27(18.1)
Unemployed	7(4.7)	7(4.7)
Mothers occupation		
Artisan	11(7.4)	8(5.4)
Civil servant/professional	78(52.7)	63(42.3)
Others	10(6.8)	19(12.8)
Trader/Farming	45(30.4)	56(37.6)
unemployed	4(2.7)	3(2.0)
Studentship		
No	16 (10.8)	13 (8.7)
Yes	132(89.2)	136(91.3)

Majority of respondents in the 2 states reported that the pandemic is real (Table 2). The perceived self-assessment of dietary and physical activity of respondents in the two states shows that majority of respondents 80 out of 148 (54.1%) and 64 out of 149 (43%) in Osun and Oyo states respectively have been very inactive compare to before the pandemic and that they consume food more than before. The lifestyle and socio-economic status of most of the respondents in the two states have their needs easily met before the pandemic. While a higher proportion of those in Osun (total lockdown) state had their

needs extremely difficult to meet during the pandemic period, most of those from Oyo (partial lockdown) had their needs only a little difficult to meet. Majority of respondents do not attend religions programme as often as they did before pandemic. Percentage of respondent that take alcohol remained unchanged in both periods in Oyo state but there was 3 times increase in the percentage of respondents feeling depressed/tired of life in both states.

Table 2: Perception of Current Pandemic and self-assessment of dietary and physical activity.

Variables	Osun (148)	Oyo (149)	Statistics
Belief pandemic is real	135(91.2)	132(88.6)	
Sources of information (multiple responses)			
Family/friends	106(71.6)	114(76.5)	
Health facility	71(48.0)	70(47.0)	
Social media	86(58.1)	105(70.1)	
Television, radio	97(65.5)	86(57.7)	
Thoughts about restriction of movement (multiple responses)			
For our own benefit	118(79.7)	102(68.6)	
Government gave the order so we have to comply	31(21.0)	63(42.3)	
It is a punishment for the poor	43(29.1)	32(21.5)	
It is doing more harm than good	90(60.8)	54(36.2)	
It is in the interest of everybody	75(50.7)	92(61.7)	
Physical activity	41(27.7)	47(31.5)	X ² = 4.045
.Same as before	27(18.2)	38(25.5)	df=2
Very active, more than before	80(54.1)	64(43.0)	p=0.1323
Very inactive, less than before			
Food consumption			
Same as before	24(16.2)	40(26.8)	X ² =5.920
Less than before	58(39.2)	58(38.9)	df=2
More than before	66(44.6)	51(34.2)	p=0.058
Carbonated drink consumption			
As before	85(57.4)	98(65.8)	X ² =4.010
Less	29(19.6)	30(20.1)	df=2
More	34(23.0)	21(14.1)	p=0.1347
Weight assessment			
Gained weight	54(36.5)	59(39.6)	X ² =1.005
Lost weight	32(21.6)	36(24.2)	df=2
Same as before	62(41.9)	54(36.2)	p=0.6050

*Statistically significant <0.05

The respondents' assessment of how the pandemic has affected their mental and psychosocial state is shown in Table 3 where majority of the respondents' in both states

reported that their parents could not meet up with their needs though more in Osun state. While 49.3% assessed their state to be perfect or felt just a little bothered in Osun state, up to 71.2% had this level of their self-assessment in Oyo state. This difference was statistically significant ($p = 0.0047$).

Table 3: Respondents assessment of mental and psychosocial state

Variables	Osun State	Oyo State	Statistics
How the pandemic has affected your ability to meet your needs (multiple responses allowed)			
It is too hard to feed during this period	25(16.9)	11(7.4)	
Affect all the business	13(8.8)	15(10.0)	
Unable to work due to lockdown	47(31.8)	11(7.4)	
	59(39.9)	24(16.1)	
	24(16.2)	6(4.0)	
How the pandemic has contributed to your mental/psychological state (multiple responses allowed)			
Unable to go out as usual	120 (81.1)	24 (16.1) 61(40.9)	
Boring	136(91.9)	77(51.5)	
Affecting work and school	86(58.1)	32(21.5)	
Inability to attend programmes	49(33.1)		
Self-assessment of mental/psychological state			
Perfect	40(27.0)	57(38.3)	$\chi^2=14.997$ $df=6$ $p=0.0047$
A little bothered	33(22.3)	49(32.9)	
Average	47(31.8)	26(17.4)	
Very worried	13(8.8)	9(6.0)	
Terrible	15(10.1)	8(5.4)	

Table 4 shows respondents' assessment of reproductive health needs in Osun State. Among those who are sexually active, there is a slight reduction in accessibility to condom from 48.6% to 41.2% before and during the pandemic respectively but not statistically significant.

Table 4: Respondents assessment of reproductive health needs in Osun state

Variables	Osun state		Statistics
	4 weeks before pandemic	4 weeks of the pandemic	
Keep a lover-friend partner	n= 148 88(59.5)	n = 148 85(57.4)	NA
How you communicate (multiple responses)	n=88 88(100.0)	n=85 23 (27.1) 62 (72.9)	NA
Face to face	88(100.0)		
Over the phone			
Sexually involved	n=88 35(39.7)	n=85 17 (20.0)	NA
Who was your Sexual partners	n=35	n=17	$\chi^2=0.480$
Just one person	24(68.6)	10(58.8)	$df=2$
More than one person	11(31.4)	7(41.2)	$p= 0.4882$
Frequency of sex	n=35	n=17	$\chi^2=1.0327$
Same age range	29 (82.9)	12 (70.6)	$df=2$
More elderly/Teacher/Boss	6 (17.1)	5 (29.4)	$p= 0.3095$
Frequency of sex	n=35	n=17	$\chi^2=5.470$
Less than once a week	19(54.3)	8(47.1)	$df=3$
More than once a week	11(31.4)	2(11.7)	$p= 0.06488$
Once a week	5(14.3)	7(41.2)	
Accessibility of condom	n=35	n=17	$\chi^2=0.7234$
Easily accessible	17(48.6)	7(41.2)	$df=2$
Not easily accessible at all	4(11.4)	2(11.8)	$p= 0.8676$
Not easily accessible most time	9(25.7)	4(23.5)	
Don't normally use it	5(14.3)	4(23.5)	
Use condom last sex	n=35 22 (62.9)	n=17 9 (52.9)	
Reason for none use of condom	n=13	n=8	$\chi^2=5.523$
I trust my partner	3(23.1)	1(12.5)	$df=4$
My partner doesn't like it/rejected it	9(69.2)	2(25.0)	$p= 0.1373$
I don't like it	1(7.7)	1(12.5)	
Couldn't get to buy/couldn't go out	0	4(50.0)	
Had any need for emergency contraceptive	n=21	n=10	$\chi^2=1.978$
Yes and got it	14(66.7)	4(40.0)	$df=2$
Yes but couldn't get it	7(33.3)	6(60.0)	$p= 0.1596$
Engaged in masturbation/pornography	n=148	n=148	$\chi^2=0.968$
Sometimes	57(38.5)	49(33.1)	$df=3$
Often	23(15.6)	24(16.2)	$p= 0.6164$
No	68(45.9)	75(50.7)	
Ever engaged in sex toys	0	0	NA
Suggestion to meet young people's social and reproductive health needs			NA
Government should provide food for all	53(35.8)		
There should be house to house testing	25(16.9)		
More health education is needed	61(41.2)		
Allow people to live their normal lives	77(52.0)		
Create social platform for interactions	16(10.8)		
Financial support for the traders and artisans	14(9.4)		

In Oyo state however (Table 5), accessibility to condom remains about the same in proportion of those who are sexually active before and during the pandemic.

Table 5: Respondents assessment of reproductive health needs in Oyo state

Variables	Oyo state		Statistics
	4 weeks before pandemic	4 weeks of the pandemic	
Keep a lover-friend partner	79(53.0)	79(53.0)	NA
How you communicate (multiple responses)	n=79	n=79	NA
Face to face	79(100)	57(72.2)	
Over the phone	79(100)	79(100)	
Sexually involved	n=79	n=79	NA
	42 (15.5)	29 (8.8)	
Who was your Sexual partners	n=42	n=29	$\chi^2=1.249$
Just one person	25 (59.5)	21(72.4)	df=2
More than one person	17 (40.5)	8 (27.6)	p= 0.2637
Same age range	n=42	n=29	$\chi^2=0.992$
More elderly/Teacher/Boss	34(81.0)	26(89.7)	df=2
	8(9.0)	3(10.3)	p= 0.3192
Frequency of sex	n=42	n=29	$\chi^2=0.3381$
Less than once a week	25(4.1)	19(0.7)	df=3
More than once a week	6 (10.8)	3(4.7)	p= 0.8444
Once a week	11(0.7)	7(3.4)	
Accessibility of condom	n=42	n=29	$\chi^2=0.4036$
Easily accessible	26(61.9)	18(62.1)	df=2
Not easily accessible at all	12(28.6)	7(24.1)	p= 0.9395
Not easily accessible most time	3(7.1)	3(10.3)	
Don't normally use it	1(2.4)	1(3.4)	
Use condom last sex	n=42	n=29	NA
	28(66.7)	19(65.5)	
Reason for none use of condom	n=14	n=10	$\chi^2=2.057$
I trust my partner	5(35.7)	1(10.0)	df=3
My partner doesn't like it/rejected it	8(57.2)	8(80.0)	p= 0.3575
I don't like it	1(7.1)	1(10.0)	
Had any need for emergency contraceptive	n=10	n=7	$\chi^2=0.0925$
Yes and got it	8(80.0)	6(85.7)	df=2
Yes but couldn't get it	2(20.0)	1(14.3)	p= 0.7610
Engaged in masturbation/pornography	n=149	n=149	$\chi^2=2.619$
Sometimes	64(43.0)	77(51.7)	df=3
Often	37(24.8)	28(18.8)	p= 0.2700
No	48(32.2)	44(29.5)	
Ever engaged in sex toys	0(0)	0(0)	NA
Suggestion to meet young people's social and reproductive health needs			NA
Government should provide food for all	44 (29.5)		
There should be house to house testing	51 (34.2)		
More health education is needed	79 (53.0)		
Allow people to live their normal lives	58 (38.9)		
Create social platform for interactions	11 (7.4)		
Financial support for the traders and artisans	10 (6.7)		

The overall economic assessment of respondents within each of the states before and during the pandemic. Table 6 reveals the difference between the economic status of respondents in Osun state (total lockdown) before and during the pandemic was found to be statistically significant with $p < 0.0001$ unlike that of Oyo state (partial lockdown). Likewise, the difference between the psychosocial status of respondents in Osun state before and during the pandemic was

found to be statistically significant with $p < 0.0001$ and the difference between the reproductive needs status of respondents in Osun state before and during the pandemic was also found to be statistically significant with $p = 0.0001$.

Table 6: Overall assessment within the states before and after the pandemic

	Osun (full lockdown)		Statistics	Oyo (partial lockdown)		Statistics
	Before	During		Before	During	
Overall economic assessment						
Not favourable	22	43	$\chi^2=28.994$	19	25	$\chi^2=3.164$
Moderately favourable	44	68	df=2	57	59	df=2
Very favourable	82	37	p= 0.0001	73	65	p= 0.5178
Overall psychosocial assessment						
Not favourable	11	27	$\chi^2=41.759$	13	22	$\chi^2=4.372$
Moderately favourable	19	57	df=2	28	35	df=2
Very favourable	118	64	p<0.0001	108	92	p= 0.1124
Overall reproductive needs						
Meet up reproductive needs	117	56	$\chi^2=51.761$	113	99	$\chi^2=3.204$
Unable to meet up with needs	31	92	df=1	36	50	df=1
			p=0.0001			p= 0.074

Table 7: Overall assessment between the states before and after the pandemic

	Before pandemic		Statistics	During pandemic		Statistics
	Osun	Oyo		Osun	Oyo	
Overall economic assessment						
Not favourable	22	19	$\chi^2=2.412$	43	25	$\chi^2=13.086$
Moderately favourable	44	57	df=2	68	59	df=2
Very favourable	82	73	p= 0.299	37	65	p< 0.0001
Overall psychosocial assessment						
Not favourable	11	13	$\chi^2=2.329$	27	22	$\chi^2=10.794$
Moderately favourable	19	28	df=2	57	35	df=2
Very favourable	118	108	p= 0.3120	64	92	p<0.0045
Overall reproductive health needs						
Meet up reproductive needs	117	113	$\chi^2=0.439$	56	99	$\chi^2=24.349$
Unable to meet up with needs	31	36	df=1	92	50	df=1
			p= 0.5074			p<0.0001

In the same vein, between the respondents in Osun state and Oyo state during the pandemic, the difference between the economic assessment of was found to be statistically significant with $p < 0.0001$;

between the psychosocial assessment also found to be statistically significant ($p < 0.0045$) and between the reproductive health needs to be statistically significant ($p < 0.0001$). There are also statistical significant differences when the assessment was made before the pandemic and compared between the two states and also during the pandemic as in Table 7.

Table 8 shows the predictors of economic effect of COVID-19 on adolescent in Osun and Oyo state using logistic regression. These includes age, educational level attained, to what extent needs are met, receiving stipends from parents and studentship. In comparison, with respondents with the age group of 10-12 years in both states, respondents within the age group of 13-15years and 16-19years are 2 times more likely to have economic effect of COVID-19 with (O.R = 2.158 and O.R = 2.365) respectively. Respondents with primary education are less likely to have economic effect of COVID-19 with O.R = 0.815 while respondents with secondary education are 2 times more likely to have economic effect of COVID-19 and respondents with tertiary education is 3 times more likely to have economic effect of COVID-19 with (O.R = 2.587 and O.R = 3.440) respectively compared to respondents with no formal education. Respondents that are not students are more likely to feel economic effect of COVID-19 with O.R = 1.508 compared to respondents who are students.

Table 8: Predictors of economic effect of COVID-19 on adolescent in Osun and Oyo state using logistic regression

Explanatory factors	B	OR (95% CI)	df (p-value)
Age(years)			
10-12(Ref)			
13-15	0.769	2.158 (1.031 - 4.519)	1 (*0.041)
16-19	0.861	2.365 (0.899 - 6.220)	1 (0.081)
20-24	0.376	1.456 (0.634-3.345)	1 (0.376)
Educational level attained			
No formal education (Ref)			
Primary	0.596	0.815 (0.880 - 3.743)	1 (0.106)
Secondary	0.950	2.587 (1.287 - 5.197)	1 (*0.008)
Tertiary	1.236	3.440 (1.467 - 8.067)	1 (*0.004)
To what extent needs are met			
A little difficult(Ref)			
Easily	-0.479	0.619 (0.260 - 1.476)	1 (0.280)
Extremely difficult	-0.250	0.779 (0.258 - 2.132)	1 (0.627)
Receiving stipends from parents			
Yes(Ref)			
No	0.034	3.002 (0.282 - 3.560)	1 (0.998)
Studentship			
No (Ref)			
Yes	0.411	1.508 (0.437 - 5.207)	1 (0.515)

Omnibus test; $X^2 = 180.472$, p -value < 0.001 . Correct classification; 78.6%

Table 9 shows the predictors of social effect of COVID-19 on adolescent in Osun and Oyo state using logistic regression. These includes age, educational level attained, smoking, intake of alcohol, feeling depressed, attending social activities and attending religious programmes. In comparison with respondents with the age group of 10-12 years in both states, respondents within the age group of 13-15years are less likely to have social effect of COVID-19 with O.R = 0.854 also compared with respondents within the age group 16-19years and 20-24years that are more likely to have social effect of COVID-19 with (O.R = 1.565 and O.R = 1.433) respectively. Formal education of respondents is much less likely to have social effect on COVID-19 with (O.R for Primary education = 0.619, O.R for Secondary education = 0.779 and O.R for Tertiary = 0.462) compared to respondents with no formal education.

Table 9: Predictors of social effect of COVID-19 on adolescent in Osun and Oyo state using logistic regression

Explanatory factors	B	OR (95% CI)	df (p value)
Age (years)			
10-12(Ref)			
13-15	-0.158	0.854 (0.281 – 2.592)	1 (0.780)
16-19	0.448	1.565 (0.456 – 5.374)	1 (0.477)
20-24	0.359	1.433 (0.675 – 3.042)	1 (0.349)
Educational level attained			
No formal education(Ref)			
Primary	-0.479	0.619 (0.260 – 1.476)	1 (0.280)
Secondary	-0.250	0.779 (0.258 – 2.132)	1 (0.627)
Tertiary	-0.771	0.462 (0.157 – 1.360)	1 (0.161)
Smoking			
Yes(Ref)			
No	-0.561	0.382(0.186 – 0.785)	1(*0.007)
Taking alcohol			
Yes(Ref)			
No	0.670	0.495(0.273 – 0.899)	1(*0.028)
Feel depressed / tired of life			
Yes(Ref)			
No	0.524	1.688 (0.284 – 10.05)	1 (0.565)
Can't say	0.505	1.657 (0.167 – 16.464)	1(0.667)
Attending social activities			
Never(Ref)			
Very often	-1.754	0.173 (0.021 – 1.418)	1 (0.102)
Occasionally	-0.733	0.480 (0.063 – 3.636)	1 (0.478)
	0.082	1.086(0.306– 3.850)	1 (0.899)
Attending religious programmes			
>3 times a week(Ref)			
1-3 times / week	-1.183	0.833 (0.146 – 4.745)	1 (0.837)
I don't attend	-1.533	1.201 (0.032 – 1.463)	1 (0.116)
Occasionally	0.726	2.483 (0.331 – 12.910)	1 (0.437)

Omnibus test; $\chi^2 = 221.174$, p -value < 0.001. Correct classification; 85.6%

Table 10 shows the predictors of reproductive health needs of COVID-19 on adolescent in Osun and Oyo state using logistic regression. These includes age, sex, educational level attained, studentship, relationship with lover partner, frequency of sex, accessibility of condom, where condom is obtained and use of condom during the last sex.

Table 10: Predictors of reproductive health needs of COVID-19 on adolescent in Osun and Oyo state using logistic regression

Explanatory factors	B	OR (95% CI)	df (p-value)
Age (years)			
10-12(Ref)			
13-15	-0.168	0.845 (0.449 – 1.593)	1 (0.603)
16-19	0.504	1.655 (0.529 – 5.183)	1 (0.387)
20-24	0.545	1.724 (0.335 – 8.860)	1(0.514)
Sex			
Female(Ref)			
Male	-1.854	0.929(0.582 – 1.481)	1(0.756)
Educational level attained			
No formal education (Ref)			
Primary	0.113	1.119 (0.568 – 2.205)	1 (0.744)
Secondary	0.179	1.196 (0.566 – 2.528)	1 (0.639)
Tertiary	0.163	1.177(0.499 – 2.776)	1 (0.709)
Studentship			
No (Ref)			
Yes	-2.731	0.065 (0.010 – 0.413)	1 *(0.004)
Relationship with lover partner			
Not so good (Ref)			
Good	-0.406	0.666 (0.365 – 1.217)	1 (0.187)
Poor	0.341	1.407 (0.433 – 4.574)	1 (0.570)
Frequency of sex			
Less than once a week(Ref)			
More than once a week	-0.699	0.497 (0.178 – 1.390)	1 (0.183)
Once a week	-0.605	0.546 (0.189– 1.578)	1 (0.264)
Accessibility of condom			
Easily accessible(Ref)			
Not easily accessible at all	-0.407	0.665 (0.349 – 1.267)	1 (0.215)
Not easily accessible most time	-0.020	0.980 (0.534 – 1.798)	1 *(0.048)
I don't use it	0.344	1.410 (0.697 – 2.852)	1 (0.339)
Where condom is obtained			
Pharmacy (Ref)			
Supermarket	0.041	1.042 (0.535 – 2.029)	1 (0.904)
Health facility	-0.150	0.860 (0.457 – 1.620)	1 (0.642)
Use of condom last sex			
Yes (Ref)			
No	-0.586	0.557 (0.132 – 2.343)	1 (0.042)

In comparison with respondents with the age group of 10-12years in both states, respondents within the age group of 13-15years are less likely to have their reproductive health needs met with O.R = 0.845 also compared with respondents within the age group 16-19years and 20-24years that are more likely to have their reproductive health needs met with (O.R = 1.655 and O.R = 1.724) respectively. In comparison with respondents who have easy accessibility to condom, respondents who find condom not easily accessible at all times are less likely to have their reproductive health needs met with (O.R = 0.665 while respondents who do not use condom are more likely to have their reproductive health needs met with O.R = 1.410. Respondents that obtain condom in health facility are less likely to have their reproductive health needs



met with $O.R = 0.860$ compared with respondents that obtain condom at the pharmacy.

DISCUSSION

In Nigeria, adolescents and young adults, age 10-24 years constitute 32% of the entire population¹¹. Poverty, as a result of prevailing socio-economic status and conditions is a major contribution to the vulnerability of these groups of persons. Over 40% of the Nigeria population are living below the poverty line. Currently, various pandemic-related movement restrictions (Total or partial lock-down) and diseases control measures are being enforced by each state in the country.

During public health emergencies, the financial burden of these groups is evidently heightened with reduced income, as a result of the various disease control measures which impacts daily on livelihoods, and consequently, influences behavioural attitudes. In addition to the financial burden, the vulnerability of adolescents and young adults during crisis, and their ability to respond appropriately, is compounded by the predisposition of this group to risky sexual behaviours.¹² The preponderance of such high-risk behaviours within young people (adolescents and young adults) is often times forced by existing events and circumstances.¹³

Access to correct and effective form of contraception is one of the most cost-effective strategies to reduce maternal mortality through preventing unintended pregnancy, thereby protecting an individual's

physical as well as mental health.¹⁴ In this study, it was discovered that access to contraceptive drastically reduced during this pandemic, especially among those under total lockdown. This is most likely because of the limitation of movement employed by the state in order to curb the spread of corona virus. Manufacture of pharmaceutical components of contraceptive methods may be disrupted due to the lockdown, as well as delay in transportation of modern contraceptive commodities are also likely reasons for this result. For example, it was documented that during the lockdown in Nepal and India, the largest provider of family planning service, Marie Stopes International was shut down.¹⁵ This may consequently lead to the increase incidence of unwanted pregnancies among the youths, which if not well managed could lead to unsafe abortion and invariably, death.

It was found in this study that majority of respondents had sex less than once a week which was more among those under partial lockdown compared with those under complete lockdown. However, the use of condom was easily accessible before the lockdown compared to during the lockdown in the state with complete lockdown. A reasonable explanation for this may be because of the privilege to move from one place to another observed partially in some states. Disruption of services and diversion of resources away from essential reproductive health care because of prioritizing the COVID19 response are expected to increase reduction in access as well as the effective use of contraceptives like condom.^{16,17} Globally, there are anticipated shortages of



contraception¹. Sexual and reproductive health clinics, which are the primary care providers for youths, women of reproductive aged group those uninsured for health care, and people on low incomes in many countries may be deemed nonessential and attention shifted to respond to COVID19.¹⁶

The overall psychosocial assessment of respondents revealed that majority of them were favorably disposed, however, more within the group under partial lockdown compared to the other group under total lockdown. This reiterated the fact that freedom of movement as well as the ability to interact with other people has a way of affecting the mental health status of an individual.

The worldwide responses to the coronavirus disease 2019 (COVID19) pandemic has disproportionately impacted negatively on the health as well as economic stability of women, girls, and vulnerable populations¹⁸. This was made vivid in this study when the ability to meet up reproductive health need among young people was drastically reduced, with most of those who couldn't meet their reproductive health need from the group with total lock down, compared with those under partial lockdown, which was statistically significant. The pandemic actually adversely affected access to reproductive health services.

During this pandemic, as new COVID-19 cases continues to emerge in the WHO European Region, many healthy individuals are being requested to stay at home in self-quarantine. In some countries, fitness

centres and other locations where individuals are normally active, will remain temporarily closed. Staying at home for prolonged periods of time can pose a significant challenge for remaining physically active. Physical activity and relaxation techniques can be valuable tools to help individuals remain calm and continue to protect your health during this time.¹⁹ Sedentary lifestyle as well as physical inactivity can have untoward effects on the quality of life, health and overall well-being of individuals, youths and adolescents, inclusive. In this study, larger percentage of respondents in both groups professed to be very inactive during the lockdown. Food consumption was more than before among both groups too. These are poor signals to overall health of individuals by the time COVID pandemic is over. Diseases like heart diseases, cancers, obesity diabetes may be the aftermath.

Attendance of religious program has grossly reduced among youths during lockdown. This is because ban was placed on social gathering including religious worship centers. There is a way religion helps align a young mind to the supreme-being which invariably will help curb some anti-social vices. This can even keep youths busy. But because of the ban, youth may devise other means to keep busy. Attention may be shifted to their mobile phones which may negatively tilt them towards both good and bad effect of social media. Furthermore, most of their parents could not meet up with their supposed needs which was more among those on total lockdown state compared to a one quarter of respondents in state with



partial lockdown. This may tilt them towards anti-social behaviors eg. stealing, burgling etc as it was seen in some part of the country during the lockdown.

More than two third of respondents under total lockdown (120, 81.1%) were unable to go out as usual. There is obviously limitation of movement which invariably will affect a whole lot of other things. As youths, they may not be able to access contraceptives if the need arise, which can lead to more risky sexual behaviors and ultimately unwanted pregnancies which may end in septic abortion and death. Also, the limitation in movement can also predispose respondents to obesity as a result of physical inactivity. About half of respondents from the group under total lockdown accepted that they were physically inactive during the period as compared to their counterparts under partial lockdown with less than half of respondents being physically inactive (54.1% versus 43%). This is a pointer to the state of mental health within these situations. There can be increased incidence of depression as well as some other mental disorders they can be predisposed to. When asked to self-assess themselves mentally, more of those who feel they are perfect mentally were from the group under partial lockdown (57% versus 38.3%) while a higher percentage of those who felt terrible were from those under total lockdown (15% versus 10.1%).

CONCLUSION

Without a doubt the pandemic has affected the young people's social, economic and reproductive needs and more in the state with total lockdown. There would have been

policies that guided the decision on total and partial lockdown in the respective states but alternative ways by which these needs could have been met could have been provided. This would have prevented any unprecedented adolescent unhealthy and risky behaviour and also guide in the design, planning and implementation of an inclusive public health emergency response framework that devotes resources to mitigate the vulnerability of this group of people.

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